AMENDMENTS TO THE CLAIMS

Please amend the present application as follows:

Claims

1-20. (Canceled)

- 21. (Not entered) An imaging device comprising:
 - a color filter array configured to generate a first set of red-green-blue (RGB) values from light incident upon the color filter array;
 - a first analog processing and analog-to-digital (A-D) conversion unit configured to receive the first set of RGB values and generate in response thereto, a set of digital RGB signals;
 - a color sensor that is independent of the color filter array, the color sensor configured to generate a second set of RGB values from light incident upon the color sensor:
 - a second analog processing and A-D conversion unit configured to receive the second set of RGB values and generate in response thereto, a set of average RGB signals; and
 - a white balance unit configured to generate white balance information from the set of average RGB signals generated by the second analog processing and A-D conversion unit.
- 22. (Not entered) The imaging device of claim 21, further comprising:
 - a color interpolation unit configured in part, to receive the set of average RGB signals generated by the second analog processing and A-D conversion unit and forward the set of average RGB signals to the white balance unit without further processing, thereby eliminating a processing time in the color interpolation unit.
- (Not entered) The imaging device of claim 22, wherein the set of average RGB signals is a digital set of average RGB signals.
- (Not entered) An imaging device comprising:
 - a first image processing path comprising:

a color filter array configured to generate a first set of red-green-blue (RGB) values from light incident upon the color filter array; and

a first analog processing and analog-to-digital (A-D) conversion unit configured to receive the first set of RGB values and generate in response thereto, a set of RGB signals;

a second image processing path that is parallel to, and independent of, the first image processing path, the second image processing path comprising:

a color sensor that is independent of the color filter array, the color sensor configured to generate a second set of RGB values from light incident upon the color sensor; and

a second analog processing and analog-to-digital (A-D) conversion unit configured to receive the second set of RGB values and generate in response thereto, a set of average RGB values; and

a common image processing path comprising:

a white balance unit configured to generate white balance information from the set of average RGB values generated by the second analog processing and A-D conversion unit; and

a color interpolation unit configured to receive the set of average RGB values generated by the second analog processing and A-D conversion unit and forward the set of average RGB values to the white balance unit without further processing, thereby eliminating a processing time in the color interpolation unit.

25. (Not entered) A method of imaging, the method comprising:

providing a color filter array;

providing a color sensor that is independent of the color filter array;

generating a first set of red-green-blue (RGB) values from light incident upon the color filter array;

converting the first set of RGB values into a set of digital RGB signals;

generating a second set of RGB values from light incident upon the color sensor, the second set of RGB values being independent of the first set of RGB values;

converting the second set of RGB values into a set of average RGB signals; providing a color interpolation unit;

propagating the set of average RGB signals through the color interpretation unit without processing in the color interpretation unit, thereby eliminating a processing time in the color interpolation unit;

providing a white balance unit; and

receiving in the white balance unit, the set of average RGB signals from the color intercolation unit; and

generating in the white balance unit, white balance information from the set of average RGB signals.

- 26. (New) The imaging device of claim 21, wherein the first set of RGB values provides pixel-level information of a captured image and the second set of RGB values provides proportion information between the red, green and blue components in light incident upon the color sensor.
- 27. (New) The imaging device of claim 26, wherein the proportion information comprises a first voltage representing a proportion of the red component, a second voltage representing a proportion of the green component, and a third voltage representing a proportion of the blue component.
- (New) The imaging device of claim 27, wherein each of the first, second, and third voltages is a DC voltage derived from a supply voltage of the color sensor.
- (New) The imaging device of claim 27, wherein the set of average RGB signals generated by the second analog processing and A-D conversion unit comprises a digital representation of each of the first, second, and third voltages.
- 30. (New) The imaging device of claim 27, wherein the color sensor comprises:
 - a red color filter coupled to a first photo sensor, the red color filter selected to propagate the red component in light incident upon the color sensor;
 - a green color filter coupled to a second photo sensor, the green color filter selected to propagate the green component in light incident upon the color sensor; and
 - a blue color filter coupled to a third photo sensor, the blue color filter selected to propagate the blue component in light incident upon the color sensor.

- (New) The imaging device of claim 26, wherein the set of digital RGB signals generated by the first analog processing and A-D conversion unit comprises digital RGB values for each pixel in the captured image.
- 32. (New) The method of claim 25, wherein generating the first set of RGB values comprises generating pixel-level information of a captured image and generating the second set of RGB values comprises generating proportion information between the red, green and blue components in light incident upon the color sensor.
- 33. (New) The method of claim 32, wherein generating of proportion information comprises generating of a first voltage representing a proportion of the red component, generating a second voltage representing a proportion of the green component, and generating a third voltage representing a proportion of the blue component.
- 34. (New) The method of claim 33, wherein converting the second set of RGB values into the set of average RGB signals comprises generation of a digital representation of each of the first, second, and third voltages.
- (New) The method of claim 33, further comprising: coupling a DC voltage into the color sensor; and generating the first, second, and third voltages from the DC voltage.
- 36. (New) The method of claim 33, wherein providing the color sensor comprises: coupling a red color filter to a first photo sensor, the red color filter selected to propagate the red component in light incident upon the color sensor;
 - coupling a green color filter to a second photo sensor, the green color filter selected to propagate the green component in light incident upon the color sensor, and
 - coupling a blue color filter to a third photo sensor, the blue color filter selected to propagate the blue component in light incident upon the color sensor.
- (New) The method of claim 32, generating the first set of RGB values comprises capturing pixel-level information of an image; and wherein converting the first set of RGB values into

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the set of digital RGB signals comprises generating digital RGB values for each pixel in the image.

- 38. (New) The imaging device of claim 24, wherein the first set of RGB values provides pixel-level information of a captured image and the second set of RGB values provides proportion information between the red, green and blue components in light incident upon the color sensor.
- 39. (New) The imaging device of claim 38, wherein the proportion information comprises a first voltage representing a proportion of the red component, a second voltage representing a proportion of the green component, and a third voltage representing a proportion of the blue component.
- 40. (New) The imaging device of claim 38, wherein the set of RGB signals generated by the first analog processing and A-D conversion unit represents digital RGB values for each pixel in the captured image.